ABSTRACT

A home entertainment appliance includes a computer system and a television system. A video monitor or television monitor of the home entertainment system shows a sequence of video frames generated in the appliance based upon at least one received sequence of interlaced video fields each containing a number of scan lines. A video system of the appliance receives a first field, temporarily stores the first field in an input buffer, and then in a loop, while video fields are being received, performs various other steps. The other steps include receiving a next field, compensating the field in the input buffer, deinterlacing the received field with the compensated field in the input buffer, temporarily storing the received field, merging the received field and the compensated field into a video frame of the second sequence, and providing the video frame of the second sequence to a subsequent device. Compensating, when performed, may be accomplished by shifting the position of one of the fields downward with respect to the field as it is received, or may be accomplished by delaying the field until the next field is received.